

IN THE CLAIMS

This listing of claims replaces all prior versions, and listings, in this application.

1. (currently amended) A method of detecting an agent that modulates the activity of CCRL2, the method comprising:

- (a) contacting a CCRL2 polypeptide comprising the sequence shown in SEQ ID NO: 2 or 4 with a macrophage inflammatory protein-4 (MIP-4) polypeptide comprising the sequence shown in SEQ ID NO: 6 in the presence of a candidate agent under conditions, which in the absence of the test candidate agent, permit the binding of the MIP-4 polypeptide to the CCRL2 polypeptide; and
- (b) monitoring binding of the CCRL2 polypeptide to the MIP-4 polypeptide or activity of the CCRL2 polypeptide, thereby determining whether the candidate agent is capable of modulating the modulates interaction between said CCRL2 polypeptide and said MIP-4 polypeptide.

Claim 2-3 (cancelled)

4. (previously presented) A method according to claim 1, wherein the candidate agent is a polypeptide, an antibody or antigen-binding fragment thereof, a lipid, a carbohydrate, a nucleic acid or a chemical compound.

5. (previously presented) A method according to claim 1, wherein step (b) comprises monitoring binding of the CCRL2 polypeptide to the MIP-4 polypeptide.

6. (previously presented) A method according to claim 5, wherein the binding of the CCRL2 polypeptide to the MIP-4 polypeptide is monitored using label displacement, surface plasmon resonance, fluorescence resonance energy transfer, fluorescence quenching or fluorescence polarization.

7. (previously presented) A method according to claim 1, wherein the MIP-4 polypeptide is detectably labelled.

8. (original) A method according to claim 7, wherein the MIP-4 polypeptide is detectably labelled with a moiety is a radioisotope, a fluorophore, a quencher of fluorescence, an enzyme, an affinity tag or an epitope tag.
9. (previously presented) A method according to claim 1, wherein step (b) comprises monitoring the signalling activity of the CCRL2 polypeptide.
10. (previously presented) A method according to claim 9, wherein the signalling activity is monitored by measurement of guanosine nucleotide binding, GTPase activity, adenylate cyclase activity, cyclic adenosine monophosphate (cAMP), Protein Kinase C activity, phosphatidylinositol breakdown, diacylglycerol, inositol triphosphate, intracellular calcium, MAP kinase activity or reporter gene expression.
11. (original) A method according to claim 10, wherein the signalling activity is monitored by measuring the activity of Gi3.
12. (previously presented) A method according to claim 1, wherein step (b) comprises monitoring the chemotactic activity of the CCRL2 polypeptide.
13. (previously presented) A method according to claim 1, wherein the CCRL2 polypeptide is expressed on a cell.
14. (original) A method according to claim 13, wherein the cell is a yeast cell.
15. (original) A method according to claim 14, wherein the yeast cell comprises a G protein in which at least 5 amino acids at the carboxy terminal of a yeast G subunit have been replaced with the corresponding residues from a non-yeast G protein.
16. (original) A method according to claim 15, wherein the non-yeast G-protein is Gi3.

17. (previously presented) A method according to claim 1, wherein the CCRL2 polypeptide is present:

- (a) in or on synthetic liposomes; or
- (b) in or on virus-induced budding membranes; or
- (c) in or on an artificial lipid bilayer; or
- (d) in a membrane fraction from cells expressing the CCRL2 polypeptide.

Claims 18-42 (cancelled)

43. (currently amended) A kit for detecting an agent that modulates the activity of CCRL2, the kit comprising: (i) a MIP-4 polypeptide comprising the sequence shown in SEQ ID NO: 6; and (ii) a CCRL2 polypeptide comprising the sequence shown in SEQ ID NO: 2 or 4, or a polynucleotide encoding a CCRL2 polypeptide comprising the sequence shown SEQ ID NO: 2 or 4, where (i) and (ii) are in separate containers.

44. (original) A kit according to claim 43, which comprises a cell transformed with a polynucleotide encoding a CCRL2 polypeptide.

45. (original) A kit according to claim 43, wherein the CCRL2 polypeptide is present in a cell membrane fraction, a synthetic liposome or a virus-induced budding membrane.

Claims 46-59 (cancelled)

60. (new) A method of detecting an agent that modulates the activity of CCRL2, the method comprising:

- (a) contacting a CCRL2 polypeptide comprising:
 - the sequence shown in SEQ ID NO: 2 or 4, or
 - a sequence which is at least 90% identical to the sequence shown in SEQ ID NO: 2 or 4 over its entire length and which has the receptor activity of CCRL2;
- with a macrophage inflammatory protein-4 (MIP-4) polypeptide comprising
- the sequence shown in SEQ ID NO: 6, or

- a sequence which is at least 90% identical to the sequence shown in SEQ ID NO: 6 over its entire length and which binds to and activates a signalling activity of CCRL2;

where the CCRL2 polypeptide and MIP-4 polypeptide are contacted in the presence of a candidate agent under conditions, which in the absence of the candidate agent, permit the binding of the MIP-4 polypeptide to the CCRL2 polypeptide; and

- (b) monitoring binding of the CCRL2 polypeptide to the MIP-4 polypeptide or activity of the CCRL2 polypeptide, thereby determining whether the candidate agent modulates the interaction between said CCRL2 polypeptide and said MIP-4 polypeptide.